SOME SHORT ANSWERS William Bricken June 1991

Answers to some journalistic questions.

1. Before discussing the implications of the technology, could you briefly describe what you believe the virtual reality system of the future will be. For example, will this technology be readily available in homes and if so, in what form? Also, how "real" can the experience of virtual reality become?

In homes in ten years, multiple and embedded systems, price from \$1K to \$20K. Form depends on who puts money behind development. Nintendo-like LCD viewing in three years; many new, exotic i/o devices. Many partial systems. "Real" is defined as *subjective presence*, which has already been achieved by cinema. Simulation of physical reality is misdirected.

2. It seems that the possible applications of virtual reality are endless. As the article we discussed mentioned, people could commit many violent and perverse acts in a virtual world. With this in mind, please discuss some applications of this technology that you feel might be questionable for society. Also, could you briefly discuss the possibility of people trying to act out these experiences outside of the virtual environment?

Violence and perversity are completely subjective and in VR will have no associated stigma. In case of violence, push RESET. Inconsistent worlds will eliminate all destructive interference from others. If you don't like someone, turn off their representation and its effects. The main problem here is bringing too much assumption of the physical to the virtual. Researchers are in no position to guess about questionable applications, that is the role of the legal system. We should differentiate between ills of society (congestion, addiction, pollution, degradation, ...) and the technologies which can be used, generically, to add to or reduce these ills. There are no inherent problems in VR explicitly; even a Kleenex can be used nefariously, if you try. Transfer is still a research question. How many kids died trying to fly off of roofs acting out Superman? How many of those were disturbed to begin with? Generally, people are *superbly skilled in not confusing alternative realities*. Folks who are worried about negatives should examine their own minds.

3. Related to question 2, if the potential for deviant behavior is high, do you believe that there might come a time when government might try to regulate the use of this technology?

Come on, check on the sociology of deviance. Deviant behavior is socially and contextually determined, it is a relationship not an phenomenon. VR provides its own context, the challenge is to decide on the appropriate rules for consenting participants. It is the control freaks who want to regulate cyberspace, for their own needs. Generally, if you don't like what is going on in cyberspace, don't tune in. VR = complete freedom. Again the main error is assuming that there is only one cyberspace. There are as many as there are participants. The government is in the business of regulation, but it is difficult to imagine a justifiable regulation scenario. Same rules as books and cinema.

4. Do you see people becoming addicted to the use of this technology? How might prolonged exposure to virtual reality affect our relationships with others?

People become addicted to pleasant experiences. VR is pleasant, so VR is addictive. VR can also be extremely productive, so we have productive addiction, just what our society encourages. The analogy is CRTs: addictive in the form of TV, ok eight hours a day if you are word processing. VR is multiple participant, so relationships will have a new context. Every technology affects our interaction with others, VR will be about the same as TV, movies, books, cars, phones, etc; it will affect everything in many (surprising) ways. It is completely arrogant to think that any person might be able to foresee the impact of VR in society.

5. On the phone, you mentioned television's effect on children and suggested that virtual reality might produce similar results. Could you elaborate on this?

Silly comparison. Metaphors are choices without differential validity, so at least pick one with something more than face validity. VR will produce similar results as scuba (both are immersive), as soup spoons (both are interactive), as dinner parties (both are social). 6. On the other side of the coin, what are some ways in which virtual reality could improve our society?

VR will amplify our interaction with information, propose new metaphysical models, reduce symbolic dominance, provide great entertainment. None of these are *improvements*, they are events which support all kinds of superimposed value judgments. Society is complex, we will see an extremely wide diversity of reactions and evaluations to VR. The main problem with all these questions is that they impose a grand simplification, that somehow society and people are regular, predictable, and understandable. VR = individualization, as does American society. *All* things are happening, all value interpretations are valid for VR. Never talk about "society", it is an abstraction that differs for every individual and is essentially ill-defined. Get relative!